1200 G Street, NW • Suite 500 Washington, DC 20005 202-628-6380 • Fax: 202-393-5453 www.atis.org



Problem Solvers to the Telecommunications Industry

Standards Committee T1

February 24, 2003

Telecommunications Industry Forum Mr. John Muleta Bureau Chief Wireless Telecommunications Bureau Federal Communications Commission 445 12th Street, SW

Ordering and Billing Forum

Washington, DC 20554

Network Interconnection Interoperability Forum

ATIS/ESIF Ex Parte Communication in CC Docket No. 94-102 (Non-Service-Initialized-Phones Order)

Industry Numberina Committee

Dear Mr. Muleta:

Re:

Protection Engineers Group

The purpose of this communication is to provide the Federal Communications Commission ("FCC" or "Commission") with information regarding the Emergency Services Interconnection Forum's (ESIF)<sup>1</sup> further examination into alternatives to the sequential number code, 123-456-7890, for non-service-initialized handsets. Specifically, the ESIF is recommending the use of the solution found in Annex C of J-STD-036, which provides for a surrogate number code of 9-1-1 plus seven digits based on the wireless handset's Electronic Serial Number (ESN) or International Mobile Station Equipment Identity (IMEI).

Standards Committee O5

Network Reliability

Steering Committee

Internetwork Interoperability Test Coordination Committee

After study and review of the technical options, the ESIF has reached consensus that the best available solution for all parties involved - carriers, manufacturers and public safety is Annex C of J-STD-036. The reasons for this determination, as well as some related observations, are provided below.

Telecommunications Fraud Prevention Committee

By way of background, ATIS, on behalf of the ESIF, filed a petition ("ATIS/ESIF Petition") seeking reconsideration of the Commission's Order regarding the use of the sequential number code, 123-456-7890, as the telephone number/mobile identification number in non-service-initialized handsets. Contemporaneously, ATIS, again on behalf of ESIF, filed a Request seeking a stay of the effective date of October 1, 2002 for the mandatory implementation of the sequential number code, 123-456-7890, by service

International Forum on ANSI-41 Standards

> Interactive Voice Response Forum

> > TTY Forum

Technology

Administrative Council for Terminal Attachments

IMSI Oversight Council

**Emergency Services** Interconnection Forum

Treasurer

ATIS

<sup>&</sup>lt;sup>1</sup> The ESIF is a sponsored committee of ATIS jointly convened by ATIS and the National Emergency Number Association ("NENA") to facilitate the identification and resolution of technical issues related to the interconnection of the telephony and emergency services networks. Further information on the ESIF is available at www.atis.org/atis/esif/esifhome.htm.

<sup>&</sup>lt;sup>2</sup> J-STD-036, "Enhanced Wireless 9-1-1 Phase 2," August 2000 (published as a joint standard by the Telecommunications Industry Association ("TIA") on behalf of Committee TR-45 and ATIS, on behalf of Committee T1).

<sup>&</sup>lt;sup>3</sup> ATIS Petition for Reconsideration Regarding the Commission's Rules on Non-Initialized Phones, CC Docket No. 94-102 (filed June 12, 2002).

<sup>&</sup>lt;sup>4</sup> See Revision of the Commission's Rules to ensure Compatibility with Enhanced 911 Emergency Calling System, CC Docket No. 94-102, Report and Order (May 23, 2002).



providers and manufacturers ("ATIS/ESIF Stay"). On September 30, 2002, the Commission adopted an Order granting a stay of the October 1, 2002 effective date pending consideration of the ATIS/ESIF Petition.

The ATIS/ESIF Petition identified the Annex C surrogate number solution, which had not previously been introduced into the record, and discussed the potential benefits of this solution over the proposed sequential number solution in the Commission's Order. The ESIF opened a work item and continued to study the Annex C surrogate number solution, as well as, explore other potential technical solutions to the non-service-initialized phone call-back issue. At its January 27, 2003 meeting, the ESIF reached consensus that the best available technical solution in terms of the call-back issue and other related considerations, is Annex C of J-STD-036.<sup>6</sup>

## Reasons in Support of Annex C Surrogate Number Solution

The ESIF reached consensus on the Annex C surrogate number solution for several reasons - some of which were provided in the ATIS/ESIF Petition and Stay. First, the Annex C solution was developed by industry consensus in ANSI approved standards bodies. Second, many wireless carriers have already deployed or are currently deploying Phase II wireless 9-1-1 network infrastructure that is designed and built in accordance with J-STD-036 and Annex C and there are no known issues with the deployment. Third, the Annex C solution is preferable to the proposed sequential number solution (123-456-7890) where conflict with the International Roaming MIN (Mobile Identification Number) (IRM) range is avoided (as explained in more detail in the ATIS/ESIF Petition). Fourth, the Annex C solution is preferable to the proposed sequential number solution (123-456-7890) in that it can more easily support Public Safety Answering Point (PSAP) and wireless carriers in the investigative work required to effectively deal with abuse of 9-1-1 services (as explained in more detail in the ATIS/ESIF Petition). Fifth, the ESIF found the Annex C solution to be preferable as a more circumspect solution that addresses the call-back issue not only in nonservice-initialized and 9-1-1 only phones targeted in the Commission's Order, but also in other circumstances where a valid call-back number may not be available for delivery to the PSAP (e.g., international roamers, phones with lapsed subscriptions or without subscriber identity modules and, situations where a phone may not have service in given areas due to the lack of roaming agreements).

## Observations Regarding Solutions

While in support of the Annex C solution as the best available technical solution, the ESIF would like to note, however, some observations made during its study. It is important to remember that each of these observations, to some degree, would hold true regardless of the solution implemented – the sequential number solution or the Annex C solution. *First*, the implementation of either solution in the Phase I context may require modifications in terms of software and configuration changes for some service providers.

<sup>&</sup>lt;sup>5</sup> ATIS Request for Stay Regarding the Commission's Rules on Non-Initialized Phones, CC Docket No. 94-102 (filed June 12, 2002).

<sup>&</sup>lt;sup>6</sup> See ESIF Issue 2002-14A at: <a href="http://www.atis.org/atis/ESIF/ESIF">http://www.atis.org/atis/ESIF/ESIF</a> Issues Files/ESIF-14A.pdf

<sup>&</sup>lt;sup>7</sup> A possible problem was identified where J-STD-036 as currently written could provide for the determination of the surrogate number in different manners, however, the standard, inclusive of Annex C, is currently undergoing revisions in TIA TR-45 that will provide a common and consistent defined method for determining the surrogate number code based on 9-1-1 plus the 7-digit ESN/IMEI.



Second, the implementation of either solution will not eliminate the situation where a surrogate number is successfully delivered to the PSAP but, for any number of reasons, a valid call-back number is not available to the PSAP. As with any solution currently known or examined by the ESIF, there are a number of variables that could potentially impact the identification of the call-back number during the call set-up. For example, the situation where a 9-1-1 call is placed by a valid subscriber, however, it is delivered: (1) on a competitor's analog or digital network due to signal strength; (2) on a roaming network that is not MIN/MDN (mobile identification number/mobile dialing number) separation compliant; (3) on a roaming network without a partnership agreement with the subscriber's carrier; or (4) on a network where the phone has not had time to complete full registration. All of these situations would result in the PSAP not being able to readily, or through the normal course of action, identify the caller.

Third, the implementation of either solution will not prevent or eliminate the problems associated with fraudulent callers (i.e., threats, harassment and false incident reporting). Accordingly, it is important that the public safety community continue to have the means to deal with such situations. In order to perform the necessary investigative work, the public safety community requires a valid numeric identifier that leads to subscriber information. In this context, the network providers should be able to provide, on a timely basis, the necessary subscriber information, which may include the MIN, MDN and/or ESN/IMEI. This final issue is one not directly addressed in the Commission's Non-Initialized Phones Order but one that the ESIF identified as important during its discussions.

In conclusion, the ESIF understands that a mandated implementation of J-STD-036 Annex C as a solution to the non-service-initialized handset problem would cause potentially significant cost to PSAPs, CMRS carriers and LECs. ESIF recommends adoption of this solution be accomplished via the natural movement toward deployment of J-STD-036 Annex C rather than as a separate mandated solution to the NSI issue.

Should you have any further questions or require clarification from the ESIF on the information provided above, please contact the ATIS General Counsel, Megan Campbell, at 202-434-8847. Ms. Campbell will coordinate with the ESIF leadership.

Sincerely,

Jim Nixon ESIF Chair

James Schlichting, Deputy Chief, WTB (jschlich@fcc.gov) cc:

Jared Carlson, Deputy Chief, Policy Division, WTB (jcarlson@fcc.gov)

Patrick Forster, Senior Engineer, Policy Division, WTB (pforster@fcc.gov)

Daniel Grosh, Senior Attorney, Policy Division, WTB (dgrosh@fcc.gov)

Leon Jackler, Attorney, CWD, WTB (ljackler@fcc.gov)

M. W. Thayer, Senior Engineer, Network Technology Division, OET (wthayer@fcc.gov)

Astin Buchanan, ESIF Vice Chair, Tarrant County 9-1-1 (astin@tc911.org)

Jim Lankford, ESIF Vice Chair, SBC, (jl1502@sbc.com)

Ed Hall, ESIF Co-Convener, ATIS, (ehall@atis.org)

John Melcher, ESIF, Co-Covener, NENA, (jmelcher@911.org)

Megan Campbell, ATIS General Counsel, (mcampbell@atis.org